

# GEM & JEWELLERY News

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## HARRY LEVY – GEM DEALER ELECTED AS BJA CHAIRMAN

**H**arry Levy was elected Chairman of the British Jewellers' Association at their recent AGM held at the Victoria and Albert Museum, London.



Harry Levy in his new post as Chairman of the BJA.

Harry, based in Hatton Garden, is the first coloured stone and diamond dealer to hold the office in recent years. His predecessors have tended to be involved in the manufacturing side of the trade and in precious metals. Whilst he will continue to represent all areas of the trade, Harry hopes to bring a new emphasis to the BJA.

Harry is well known to readers of *GJN*. He has served on the Editorial Board since its inception in 1991, is a regular contributor to *Around the Trade* and is the compiler of the Competitions.

Harry has a wealth of experience, having represented the trade for over a quarter of a century. On a national level he has been involved with the BJA, the London Diamond Bourse and Club and the Gem-A Gem Testing Laboratory; internationally he has played an active role representing the UK at CIBJO and other trade organizations. At present he is Vice-Chairman of the London Diamond Bourse and Club, and President of the Diamond Commission of CIBJO.

Harry read maths at Queen Mary College, London University,

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achieving an Honours degree. After several years in Hatton Garden, he went back to the academic world on a part-time basis and obtained an MSc in maths and later enrolled at Birkbeck College London where he obtained the degree of BA in Philosophy.

"I very much want the various sections of the trade to work more closely together," said Harry. "The trade can speak with a united voice, whilst retaining the individuality and interests of the many sections that make up the British jewellery industry."

## Rare items: students who will become the journal contributors of tomorrow

**O**n page 56 of this issue I comment on the scarcity of large brazilianite specimens and I could also have noted the comparative rarity of small faceted sinhalite, let alone crystals with recognizable forms. But there are still rarer items: where are the students from whom will come the contributors to *GJN* and similar publications in the next few years? There is still just as much interest as there ever was: what seems to be lacking is the sense that “I could do something with this”. There are lots of collectors and many who buy and sell rough specimens with considerable success, enthusiasm and flair. At my own University (London Guildhall) where I have been both a student and staff member, while there are not the large student numbers that there used to be, the will to learn is still there.

But this seems to be the sole end in view. Good though it certainly is, it betrays not so much a lack of self-confidence as a state of complete receptivity with no sense of possible personal involvement. Whether this reflects uninspired school teaching (there is plenty of that, despite huffing and puffing from the profession) or lack of

domestic stimulus or whether what used to be called the autodidact is now an endangered or even extinct species, I cannot say. Someone should be telling students that original work is not dropped in on the editors by the stork, nor is it found under the gooseberry bushes.

The drift to extinction of the gifted, possibly eccentric individual, affects societies, collections and the literature of a subject. Societies need to keep their membership, often widely separated geographically, closely in touch with developments in their subject at large. This sometimes leads to acrimonious exchanges in the journals but this can be taken positively as a sign that the membership is genuinely concerned over such issues as collectors' permits or large-scale misattributions of major specimens. Both these topics have recently occupied columns in the journals and newsletters of The Russell Society.

Perhaps more heat than light can sometimes be generated but it would be good to hear more from gemmologists along similar lines. Comparatively few letters reach the editors of *GJN*: we should like to see signs that life exists after examinations.

While there are always willing horses they can tend to run the same race and the profession of gemmology badly needs new blood. This would not be to shed as bloodstains, drying to brown, quickly lose their attractive red colour, but to inspire, criticize, stimulate, inform.

Take care of your students. Tell them that they can do as well as learn.

*Michael O'Donoghue*

### Can you contribute?

The editors of *GJN* welcome contributions, as do the editors Beatriz Chadour-Sampson for *Jewellery Studies* and Roger Harding for *The Journal of Gemmology*.

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## Pricing gemstones

Harry Levy looks at the various factors which affect the pricing of diamonds and coloured stones

**T**here is a great deal of reluctance for stone dealers to give price lists and price structures for better quality gemstones.

When asked to price a particular stone they will often give a range, and this range can be quite large. Those who have tried to obtain a price for a better quality coloured stone by asking a stone dealer, or anyone who handles such stones, will very rarely find agreement between dealers and again the prices given will vary largely. When asked why there is such disagreement between so-called experts they will say that there are no acceptable standards for valuing stones.

In this article I will try to explain why this state of affairs exists. I will give you no ranges of prices to help you value stones, but will try to give factors which affect the price of a stone and how these operate in the gemstone markets.

### Diamond pricing

This lack of a price structure is of course not universal in the gemstone market. We have a universally accepted price structure for diamonds. This has come about because we have an accepted universal grading system for diamonds. Diamonds are graded for colour, clarity and cut, and the weight is never controversial provided one has accurate scales. Given these four parameters, it is not difficult to devise a price list based on them.

One internationally accepted price structure is that known as the Rapaport list. This list is a grid which bases the price on the weight of the diamond and its colour and clarity grades. What many of those who use the list do not know is that the cut is incorporated into this price, because the prices given are for perfectly cut stones. Most dealers operate on a

discount based on these prices, and the discount is based on the quality of cut of the stone as well as on the demand for stones of a certain category. Thus for those who deal everyday in these diamonds the discounts given vary for different types of stones. The discount is also based on the type of grading certificate accompanying the stone. Again Rapaport asserts that his prices are based on the stone having a GIA report.

As more and more people try to use this system, they refer to Rap prices, and think that if they obtain a larger discount they have shopped well. This is rarely the case. The weight is never controversial, but the colour and clarity grades depend on which laboratory has carried out the grading report. There is no accurate 'translation' between the various laboratory reports, because they do not use such identical master stones as those of the GIA, and the terms for clarity grading are not standardised universally. Many dealers use certificates and reports from a wide variety of small laboratories, and because a laboratory uses the GIA nomenclature on its report, they assume that this is the grading the stone would have obtained had it been submitted to the GIA. Again, this is questionable.

### Discounts

Parameters are given in most grading reports to determine the cut and thus the 'look' of the stone, but most who buy or sell on discounts on the Rap list often forget about this factor. As a dealer I am often asked what is the discount I can give on, say, a one carat G coloured VS1 stone and on being given a figure will say that they can buy 'such a stone' on a larger and hence better discount. I often play a game in such cases by asking them what discount

they are getting and then tell them that they have a carat stone whose diameter is near to 6 mm. They are often surprised when they find this is the case, as a 6 mm stone has the spread of a stone nearer to 0.75 points than a one carat stone, which should spread about 6.5 mm diameter. Of course the example I have given is not always so simple, but the discount depends on the market conditions and the appearance of the stone.

Thus, when people ask for a valuation of a given diamond from an expert, he will try to grade the stone (if it does not have a certificate) and will base his price on the prevailing Rap list, and this is why most valuations tend to be fairly similar to each other. By the way, Rapaport produces a revised list every week, depending on market conditions, but prices need not change from week to week.

### Coloured stones

This situation does not exist for coloured stones, because there are no accepted grading standards for colour and clarity for such stones, and they are very rarely perfectly cut. Unlike diamonds, coloured stones

## Diamond Screening

The Gem-A Gem Testing Laboratory now has on permanent loan from the Diamond Trading Company (DTC) the DiamondView™1. This will complement the Diamond Sure™1 loaned by the DTC in 2001.

The DiamondSure™ is used in the screening process of diamonds submitted for grading, and the DiamondView™ is of assistance in differentiating between natural and synthetic diamonds.

appear in many hues and shades of colour. It is very easy to produce a hundred coloured stones of the same size and shape and type, yet be unable to obtain a pair of identical stones from such a parcel. It would be rare if this could not be done for a parcel of a hundred diamonds under the same conditions.

So what factors determine the value of coloured stones? Size, colour and clarity are important. Cut is not so crucial, as stones are often cut to maximise the weight of the final stone, and extra facets may appear where the cutter has tried to remove an imperfection in the stone, thus making it look unsymmetrical. This often does not affect the ultimate price of the stone.

Another factor which affects the price of coloured stones, especially rubies, sapphires and emeralds, is the origin of the stone. The origin is not where the stone has been bought but where it was mined, and these can often be determined on

### **Pink/orange treated sapphires**

The controversy over heated pink/orange corundums (reported in the *GJN* March 2002, p.24) continues. These stones are mined in Madagascar, cut and polished in Thailand, and heated to produce the orange colour. It appears that the colour is 'skin-deep', i.e. the stone has all the characteristics of a typical deep diffusion sapphire, but the cutters claim that they have not carried out the processes of deep-diffusion but merely that of heating the stone. Such stones should not be sold as padparadschah, but as orange-coloured sapphire and the customer should be told that the colour is only on the surface of the stone. As a result the prices of these stones have come down on the market.

*Harry Levy*

the basis of colour and types of imperfection in the stone.

### **Colour or purity**

Colour preferences vary enormously and differ from country to country. Thus colour is much more a factor in countries such as the USA and France, whereas purity is important in the UK. I remember comparing my buys with another dealer from the USA several years ago in Bangkok. I had bought dark clean sapphires, whereas he had bought lighter shades of blue but with visible marks. We finally agreed that I could sell my stones in the UK but not his stones, and he could sell his stones in the States but not in the UK.

Even today different centres, often depending on the preferences for colour of the local dealers, value stones differently for different shades of colour. But all agree that the weight of the stone, the evenness of the shade of colour within the stone (i.e. there should not be patches of colour in different parts of the stone) and the markings within the stone, all affect the price, but there is disagreement between dealers as to how these affect the value.

It is not possible to produce a master set for colour grading for, say, rubies, sapphires and emeralds, as one would have to have different sets for each locality and thus one would need a very large set of master stones. So, for example, one would need sets for Burma rubies, Siam rubies, African rubies and so on.

Price lists do already exist and grading systems are now available, but none of these have yet been fully accepted internationally, and only a limited number of dealers are familiar with them. Prices also exist for those stones which are readily and cheaply available, namely quartzes, garnets, peridots, opals and so on, but only in the cheaper grades and smaller sizes. Of course price lists are available for synthetics, but these again depend

on the quality of the rough and the quality of the cutting.

### **Enhancements**

Another important factor now affecting the price of stones is the treatments and enhancements they undergo to improve their appearance. The reason why the larger, top quality coloured stones are expensive is that they are rare. Thus it is difficult to obtain matching sets of such stones. Treatments have made matching easier, thus the price should come down. End users are now buying untreated stones, when they can afford them, and they demand to have independent verification that a stone has not undergone any treatments.

### **Market prices**

It is difficult in an article such as this to give a fully comprehensive analysis of all the factors affecting the price of a stone. Many dealers now find dealing in diamonds somewhat boring as, given a grading report and a Rap list, almost anyone could sell them. The situation with coloured stones continues to be different and there is always much more of a gamble when buying a stone as without a grading report or an acceptable price list, there is nothing to ensure that one has paid the 'correct' price for such a stone. Dealers often buy on the basis of what they have sold, and buy for that same market. They usually find that if they move into a different, unfamiliar, market their prices may not suit that market and it may take several attempts to establish what that market needs.

I hope all this may explain why, when you try to value a better quality coloured stone, you will get such a variety of opinions and prices, often differing by over one hundred per cent.

*Harry Levy*



# A cultured language for stone dealers

Recently on their website, Genesis have been offering to sell 'cultured diamonds'. What are cultured diamonds? Are they in some way more sophisticated than the ones we normally see on the market? Do they come from a centre that is cultured, or are the cutters and handlers of such stones superior to others involved in the diamond trade? Perhaps the qualifying word 'cultured' refers to the diamonds themselves and they are in some way different from other diamonds.

The last option, of course, is the case – they are synthesized or man-made diamonds. So why do we not have 'cultured' rubies, sapphires and emeralds? We come across only cultured pearls. Why have others not tried to sell man-made diamonds as 'cultured' ones?

In this article I would like to explain some history of the lexicon that the gem trade has acquired when referring to man-made stones.

## Cheap imitations

Since man first discovered gemstones and set a value on them, there have been those who have tried to find or make cheap imitations, usually to dupe an unwary customer, and sell such cheaper stones at an inflated price, often at the value of the real thing. Stone dealers have always felt threatened by such stones, thinking that they will devalue the worth in real stones and that people will stop buying gemstones as they lose confidence because they do not know what they are buying. Stone dealers have tried to evolve tests that will easily differentiate between real stones and their imitations, and this was the reason that gemstone (or gemmological) laboratories were first set up. It was for the trade that such laboratories were introduced, employing staff who knew more about science than trade. They were paid to devise tests to separate the natural stones from the artificial ones and produce an independent report to allay the fears of any buyer.

Originally all such stones were known as 'artificial'. Artificial stones were ones that had been made by man to resemble a gemstone or something found that looked like a given gemstone but did not have all the physical characteristics of that stone.

As the production of these artificial stones proliferated, the producers claimed that they were producing such stones, not to fool the general public, but to give them a cheaper but still attractive alternative to the real stones.

The artificial stones fell into two categories – those that had all the physical and chemical characteristics of the stone they were imitating, and those that had some or none of these characteristics but merely looked like the gemstone that was being copied. The former were synthetics and the latter were usually glasses or plastics. The producers of these synthetic stones felt that their products were better than the glass imitations (they were, for example, rubies and sapphires, albeit they were man-made) and began to call them by their own names, e.g. Verneuil corundums and spinels. The trade agreed that such stones were in many senses better than glass imitations and allowed the producers of these stones to refer to their products as synthetics. Where English was used the other types, namely the glass and plastic imitations, began to be known as 'pastes'. Further, the trade generally agreed that the producers of synthetics could apply their own or trade name to their stones, provided they were clearly designated as being synthetics. Thus we could have 'synthetic emeralds by Gilson'.

## Cultured pearls

In about 1920 Japan began to produce a synthetic pearl which had all the characteristics of real pearls on the surface but, unlike natural pearls, they had a bead nucleus. A bead had been inserted into the mollusc which then deposited the

## A new source of gems?

Robot heads (traffic lights) are being 'plucked like mushrooms' in Johannesburg, only to be sold for scrap metal and fake emeralds and rubies.

"Criminals will do anything to steal them," reported the manager of traffic signal systems at the Johannesburg Roads Agency. "They even go so far as to use axles and angle grinders to remove the heads, even though they have been firmly welded to the poles."

It is believed that the criminals break the coloured lenses and sell them as coloured stones such as 'emeralds' and 'rubies' at flea markets.

*Reported by K.W. Findlay,  
Johannesburg, South Africa*

pearl nacre on the bead. These were marketed as 'cultured pearls'.

This became a very busy time for the laboratories, as initially most traders could not easily distinguish between rows of these cultured pearls and rows of natural ones. Over the years the cultured pearls proliferated and became an accepted product in the jewellery trade with the name 'cultured' gaining a certain respectability both within the trade and with the buying public. The trade settled to selling real or natural pearls, cultured pearls, and paste or imitation pearls.

## Verneuil

By the 1930s the most prolific synthetic coloured stones on the market were the Verneuil-made synthetic spinels and corundums. With various metallic oxides these could be produced in most colours to resemble natural stones. Red corundum imitated the colour of the best Burma rubies, and the darker

red looked like garnet. A light blue version of the spinel could be mistaken for the colour of aquamarine. These began to be sold as synthetic garnets and synthetic aquamarines. Traders thought that this was the correct terminology for such stones. Although they had correctly designated these stones as synthetics they were not synthesized garnets and aquamarines. Aquamarine is a beryl and the Verneuil products were spinels. The trade agreed that the correct terminology for such stones should be 'synthetic corundum – garnet colour', and 'synthetic spinel – aqua colour'.

### Grown from seed

By the 1960s other producers were synthesizing other stones such as emeralds, but were not using the flame fusion method of Verneuil. They were growing them by crystallizing the stones as overgrowths on seeds of the natural stones. The Verneuil-produced stones were still much cheaper than the products of these crystal growers, and as the trade had made a distinction between synthetic stones and pastes, although both were artificial products, the crystal growers now wanted a distinction made between their stones and

## Conflict stones

We have had conflict diamonds as an issue for some time now, and fortunately the conflicts in Africa seem to be resolving themselves on a political basis and the civil wars are ceasing. So diamonds coming from these sources will no longer be regarded as Conflict Diamonds. We seem to have a whole international apparatus in place now to prevent the movement of such stones, controls which seem to be here to stay, but we no longer have conflict diamonds or conflicts, but a stigma on the diamond trade which hopefully will soon disappear.

*Harry Levy*

those produced by flame fusion. The most natural term for them to pick was the word 'cultured'. They argued that to the public the word 'cultured' had an implication of being man-made, thus no one would regard a 'cultured emerald' as being natural. Further, growing an emerald crystal on a seed of the natural stone was no different from growing the nacre of a pearl on a bead. They argued that both were produced in a specialized environment, the pearl inside an oyster and the emerald inside a pressurized atmosphere at an elevated temperature. Both processes were imitating the formation of the natural products.

### Terminology

Stone dealers dealing with natural gemstones panicked with this terminology, feeling that cultured pearls had almost entirely replaced natural pearls, and cultured gemstones could or would replace natural ones. There were reasons why cultured pearls 'drove out' the natural ones, namely the seas in which oysters were producing pearls had been over-harvested, and pollution was killing the pearl-producing oysters.

At this stage the cultured pearl producers began to lobby bodies such as CIBJO and national associations, wanting to preserve the exclusivity of the term 'cultured' for their products – the cultured pearls. They further argued that production of their pearls was limited by the number of oysters and the sea conditions, and that there could be 'crop' failure. The production of synthetic stones had none of these problems and as many synthetics could be produced as the market required. They felt the term 'cultured' would become devalued in the public perception and this would affect their pearls. They did not wish to share the term 'cultured' which they had so carefully cultivated and nurtured.

### Banned

With the natural bias which the natural-stone traders had against

synthetics, and still feeling that synthetic stones could be sold to the public as natural ones (which would undermine the whole gem trade), they found the term 'cultured' doubly threatening. People were already asking for 'real cultured pearls'! They came down on the side of the Japanese, and banned the use of the term 'cultured' to describe any gemstone other than pearls. Some of the crystal growers tried, nevertheless, to call their stones cultured but had to give way eventually as pressure was now being applied by governmental bodies for sellers to follow their own trade regulations.

The crystal growers still wanted to differentiate between synthetics that were relatively expensive to produce and the cheaper Verneuil products. They started to use terms such as 'laboratory grown' and 'man-made' eliminating the term 'synthetic' from being associated with their stones, still claiming that the use of synthetic had connotations of artificiality in the public perception and therefore cheapness. Traders in natural stones still canvassed for such terms to be banned, claiming that they were a synthetic product, a term the public understood, and any other terms could cause confusion.

### The United States

The crystal growers continued in their struggle and there were court cases. In the United States, where many kinds of trade restriction are abhorred, the authorities agreed that terms such as laboratory-grown and man-made were unambiguous and would not confuse the public, but did not give such a clear demarcation on the term cultured.

Crystal growers were now allowed to exhibit their products at trade fairs (alongside traders dealing in natural stones) without having to use the word synthetic with their products, provided some synonymous term was used so that there was a clear indication that such stones were not natural. Thus the Verneuil stones could now be sold as 'man-made' again blurring



the distinction which the crystal growers wanted for their stones.

### Cultured diamonds

Thus the surprise when 'cultured diamonds' suddenly appeared on the market. I had phone calls from all over the world asking what bodies such as CIBJO would do about the terminology of these stones.

What I have found in our trade is that there is and always will be a small amount of mis-selling of synthetic stones as real ones. We often see old rings where some of the stones are synthetic; there was a recent case where jewellery originating from Thailand contained invisibly-set carré (square) rubies and sapphires in which the stones were synthetics and thus perfectly matched; and I have seen stones in old treasuries around the world which are clearly glass. But very few dealers and jewellers would sell synthetics without declaring them as such.

### Warning

Always be wary of strangers offering you gems from some of the stone producing countries around the world. Sometimes a few synthetics are mixed in a parcel of real stones and the seller is unaware of this when he offers you stones. So unless you know your gemmology do not buy obvious 'bargains'. But often the experts are caught out as well. Some cutters have bought rough rubies not realizing that synthetic rubies have been cut and burnished to resemble real crystals.

Harry Levy

## John Sinkankas

We announce with deep regret the death of John Sinkankas of San Diego, California, on Friday 17 May after a brief illness.

A full obituary will be published in the July issue of *The Journal of Gemmology*.

## Gem and Mineral Shows

### Rock 'n' Gem Shows

Brighton Racecourse, Brighton, East Sussex 14/15 September  
Cheltenham Racecourse, Prestbury Park, Glos 20/21 July, 19/20 October  
Hatfield House, Hertfordshire 26/27 October.  
Kempton Park Racecourse, Sunbury on Thames, Middx  
10/11 August, 2/3 November\*  
Newmarket Racecourse, Suffolk 28/29 September  
Newton Abbot Racecourse, Devon 7/8 September.

\* To be held in conjunction with Gem-A Annual Conference, see p. 59.

All shows open 10 a.m. to 5 p.m. Enquiries to The Exhibition Team Ltd.  
Tel: 01628 621697 (e-mail: Rockngems@aol.com)

### British Lapidary & Mineral Dealers Association (BLMDA)

Harrogate Gem & Mineral Fair 2002  
The Old Swan Hotel, Swan Road, Harrogate, Yorks 24, 25 and 26 August

Open 10 a.m. to 4.00 p.m. Fair Organizer Rex Cook on Tel/Fax: 01282 614615 (www.blmda.com)

## JEWELLERY SALES

### Summer sale dates from the auction houses

Christie's South Kensington  
Jewellery: 2 July, 6 August, 3 September  
Rings: 17 September (Sunday view)  
Pawnbrokers' Unredeemed Pledges: 20 September  
Tel. 020 7581 7611 (www.christies.com)

### Dreweatt Neate, Donnington Priory Salerooms, Donnington, Newbury, Berkshire

General Antique and later Furniture and Effects, with a Silver and Jewellery section: 23 July  
Antique Furniture, Works of Art, Silver and Jewellery: 24 July  
General sale including Silver and Jewellery: 10 September  
Tel: 01635 553553 (auctions.dreweatt-neate.co.uk)

### Fellows & Sons, Birmingham

Antique and second-hand jewellery and watches  
(by Direction of Pawnbrokers Nationwide):  
20 June, 4 and 18 July, 15 and 29 August, 12 and 26 September,  
Antique and Modern Jewellery and Watches: 25 July, 5 September  
Tel. 0121 212 2131 (www.fellows.co.uk)

### Gardiner Houlgate, The Bath Auction Rooms, Bath

Jewellery: 3, 17 and 31 July, 14 and 28 August, 11 and 25 September  
Tel. 01225 812912 e-mail: auctions@gardiner-houlgate.co.uk

### Sotheby's, London

Modern Jewellery: 27 June, 26 August, 3 October  
Tel.: 020 7293 5000 (www.sothebys.com)

Dates correct at time of going to press but may be subject to alteration.

# Idar-Oberstein – the Gem Capital of Europe

Sheila Sylvester and Claire Scragg report on their recent tour with Gem-A

**A**s a late applicant to join the Gemmological Association's trip to Idar-Oberstein and living in Brussels as well (so that I joined the group at their hotel in Huttgeschwasen rather than travelling with them from London), I was completely uncertain what to expect from the visit. However I had just started studying gemmology in Brussels and my course tutor said that this was a visit 'Not to be missed'.

How right she was! It was everything a gemmologist – amateur or professional – could wish for.

Visits were arranged to cover all aspects of gemmology – from the mines themselves (now maintained for visitors) to seeing how the stones were cut and polished, from the traditional waterwheel-powered method to the modern up-to-the-minute workshops where professionals are happy to show their skilled methods of selecting suitable gemstone material for jewellery to the finished item – cut, faceted and polished.

Visits were also arranged to stunning and rare exhibits of crystal

formations from collections made by well-known and foremost authorities in gemmology and geology. I found the patterns and rainbow colours rivalled any work of art produced by the hand of man – perhaps a subjective view from an erstwhile art student but I am happy to take a stand on it! The gemmological museums in both Idar and Oberstein housed magnificent specimens from all over the world. And I certainly never expected to see a single crystal over 6 ft high towering over me!

We were also given the opportunity to see Professor Bank's private collection of gems and to attend a private tutorial – a great and unique privilege given Professor Bank's status as a world authority in this field. None of this would have been possible except as part of a tour arranged by the Gemmological Association.

Neither, I am sure, would it have been possible to gain access, except under the aegis of the Gemmological Association, to the workshops of artists working with every kind of gemstone material – from the small



Professor Bank takes the group on a tour of his extensive collection (photo by David Bockett).

but very precious cameos exquisitely worked – to the enormous. Magnificent works of art, some of which (although table-shaped it is simply not possible to label such beautiful objects as furniture) had been wrought and hewn from complete boulders of stone such as rose pink quartz or aventurine and jasper, jade and translucent ruby and lapis lazuli. Rock or crystal, originally up to 10 tons in weight, were being used for these flawless creations. Did I mention that we were also able to visit a workshop producing wonderful Fabergé-style pieces? I'm afraid my descriptions cannot match the jewel-spangled curiosities of this fabulous heritage. The more than once quoted statistic of something being the largest in the world is – I can assure you – no more than the truth.



Today's buys! Joanna Donohoe (left) and Brenda Foster admire Susan Berry's ring.



## Claire Scragg's Diary

### Sunday 21 April

Set off by coach from Farringdon Road, London, at 7:30 a.m. with a truly international contingent led by Susanna Van Rose and Doug Garrod. A smooth ferry crossing to Calais and away across France, Belgium and Luxembourg into Germany. Arrived at hotel in time for a splendid evening meal.

### Monday 22 April

After a hearty breakfast set off to the Steinkaulenberg mine. A most informative guide took us through the mine which at one time yielded amethyst, agate, jasper and other quartz varieties, examples of which could still be seen in situ in the form of geodes and veins.

Then on to visit Bieleschleife, the historical cutting and polishing workshop, where Ernst Beihl jr. gave a superb demonstration of this ancient craft, and to the workshop of Erwin Pauly for a demonstration of intaglio and cameo engraving.

Returned to hotel with time to relax or take advantage of the hotel's leisure facilities before dinner.

### Tuesday 23 April

Today started with a visit to Oberstein town hall with Professor Bank to see a temporary exhibition of minerals native to the area. Returned to Idar to visit Gebrüder Bank for a demonstration of cutting in their workshop. Were then shown part of Professor Bank's extensive collection of minerals and gemstones including a complete

geode which quite audibly contained liquid (the cause of some discussion at the bar during evening!). On to the home of Professor and Mrs Bank for a superb lunch.

Visit to the German Gemmological Association after lunch for a tour of their teaching facilities and reference display collections.

### Wednesday 24 April

Away to visit the Oberstein gem and mineral museum with massive examples of quartz crystals and fine displays. The fluorescent stone room was great fun. Afterwards a chance to browse in the town's many gem shops, walk up to the church built into the hillside, or simply enjoy the atmosphere in a café. Back to the hotel for pre-dinner drinks and a chance to examine some of the day's purchases with the aid of Doug and his travelling lab!

### Thursday 25 April

Departed in warm sunshine for the gemstone museum at Idar. With all exhibits perfectly displayed it is an absolute 'must' for any gemmologist.

Kirschweiler was next on our itinerary, splitting into groups to visit the small workshops. My first call was to Helmut Wolf who works on what can only be described as a very large scale in various minerals, carving and polishing bowls, items of furniture and sculptures. He has what must be the world's largest milling machine in his back garden!

From there to Emil Becker's incredible showroom. He specializes in the unusual – a crystal glass filled with precious 'ice cream' (yes, it did look good enough to eat!) and words cannot describe the beauty and craftsmanship of the items displayed. In many of his pieces he has incorporated the natural inclusions into the design. My favourite? A gold study of a hornet with diamond wings.

### Friday 25 April

For some a free day for shopping and sightseeing. But others (myself included) a return visit to Professor Bank for a private tutorial – a superb opportunity for the students in our group to ask more questions and to examine more stones from his extensive collection.

After a buffet meal, the evening culminated in a few 'night owls' examining the day's purchases over some excellent local wine.

### Saturday 26 April

Arise for an early breakfast to depart for home (somewhat reluctantly) all aboard the coach and towards Trier, a historic Roman town. For a few of us, a chance to visit jewellery designer Elena Villa at her studio to view her design books and fantastic jewellery. For the rest, a chance to buy those last minute presents (the chocolates are recommended) and soak up the wonderful historic atmosphere. Arrived back in London 9.20 p.m. – time to say goodbye to new friends and old.

Our itinerary was full and every day had been carefully planned. The hotel was located in a beautiful wooded area and we virtually had the hotel to ourselves. For fitness fanatics (as if all the walking during the day were not enough) there was a comprehensive gym, sauna and swimming pool with power jet to swim against as an extra challenge. The evenings were a time to issue friendly challenges to the tour

leaders to identify the day's purchases and spoils by the group.

This is the eighth annual tour to Idar-Oberstein arranged by the Gemmological Association, and I can certainly understand why about half of our number had made at least one previous visit (some four or five!) with the same tour. Our number included a geologist from Canada and a professional buyer of diamonds for a well-known jewellery

chain in Australia and New Zealand – apart from such rank amateurs as myself.

This trip really had everything. When is the next trip being organized? There is even a whisper to the effect that a trip to India is being planned for next year. All I can say is book your places early – you will not be disappointed.

*Sheila Sylvester*



## Midlands Branch – A Day in Celebration of 50 years of Gemmology

**T**he Branch was most fortunate in attracting eminent international guest speakers – Professor Dr Henry Hänni of the SSEF in Basel and Alan Jobbins, former Curator of Minerals and Gemstones at the Geological Museum, London – to its Celebration on Sunday 24 February.

The day to celebrate the Branch's 50th Anniversary was preceded on Friday 22 February by an address by Alan Jobbins entitled *An Orgy of Organics*. The interesting and varied subject matter, beautifully illustrated, set the tone for the weekend. Members of the committee entertained the guests, including Béatrice Hänni, and Terry Davidson, acting Chief Executive Officer, and Ian Mercer, Director of Education, both of the Gem-A, to a champagne, smoked salmon and

pâté reception followed by dinner at Barnt Green in Worcestershire on Saturday 23 February. The obviously practised skills of the members and guests were much in evidence during the clearing and washing up!

Sunday 24 February began with registration and refreshments when everyone had the chance to meet and welcome colleagues from other regions including the South West of England, Wales and Scotland. There were several excellent exhibitions: the latest books available from Gemmological Instruments; gem testing equipment new and old from the Brewster angle meter to the Tully refractometer and spectrometers; unusual gemstones and information on the Guyanese Project including 'black pearls' and interesting agate forms. A large illustrated chart itemized the highlights of gemmology

over the last fifty years with references to the activities and members of the Branch, discoveries of new gem and ornamental materials, a chronology of synthetic gemstone manufacture and advances in gemstone treatments. There was also a display of photographs and biographical details of the four speakers.

Proceedings opened with a warm welcome to all present, the five guests, members and friends from far and wide, particularly to John Henn, Vice Chairman of the National Association of Goldsmiths and Lindsey Straughton of the British Jewellers' Association, as well as Doug Morgan and Dennis Price, who had been Chairman and committee member of the Branch respectively at the time of its 25th Anniversary. The Chairman congratulated Midlands Branch award winners in the 2001 examinations: Karen McKinley for the Rayner Preliminary Prize and Alison Thomas for the Noel Deeks Diamond Prize. The first speaker, Alan Jobbins, presented the highlights of his fifty years in gemmology. Starting with his career at the Geological Survey and Museum, he covered the United Nations project in Burma in 1967 initially with very basic premises and conditions undertaking the training of a cadre staff to run a gem and mineral laboratory and gemmology training centre. He outlined his travels in Brazil, Sri Lanka, India and other countries with observations of historical as well as academic interest, beautifully illustrated with his own slides. The culmination of his long association with gemmology was his collaboration on the prestigious work on the two-volume *Crown Jewels*.

Professor Henry Hänni then gave an erudite delivery on gemstone



Midlands Branch celebration: (from left) Terry Davidson, Professor Dr Henry Hänni, Doug Morgan, Ian Mercer, Gwyn Green (Branch Chairman), David Larcher (Branch President) and Alan Jobbins.



treatments encountered in the jewellery trade and the recognition of such treatments. He used the very latest digital technology for his address, and the sharpness of the visual presentation was matched by its content, which emphasized Henry's informed but always understandable style of delivery.

The meeting adjourned for an excellent leisurely lunch during which appreciation of the food was given and requests were made for the recipe for one of the puddings (Gwyn's Brown Bread Ice Cream, see below) which was duly read out at the commencement of the afternoon session.

Terry Davidson opened the afternoon by outlining his thinking for the future commercial development of the Gem-A and in particular its close association with the jewellery trade. Ian Mercer took over with a most interesting look at the early days of the Gemmological Association and Trade Laboratory with photographs of eminent figures in the world of gemmology. Bringing the theme up to date, Ian went on to outline the new approach being taken by the Gem-A with regard to future courses, the needs of the



*A chance to examine one of the private gem collections on display.*

jewellery trade and widening the influence of the Association worldwide.

A humorous interlude was provided by Doug Morgan, mineralogist, lapidary and key figure in the Midlands' Branch for over thirty years, on the subject of political correctness in gemmological terminology.

The closing speaker of the day was Professor Henry Hänni who gave

a talk on synthetic gemstones in the 21st century, superbly illustrated and presented using state-of-the-art technology.

Before inviting the guests to take tea, the Branch President, David Larcher, brought the formal part of the proceedings to a close by presenting the speakers with engraved glass paperweights, specially commissioned and designed to mark the 50th Anniversary of the Midlands Branch. Doug Morgan presented a basket of spring plants and bulbs to the Branch Chairman and hostess of the event, Gwyn Green. The guests were most appreciative of the happy atmosphere, programme content and hospitality and voted the occasion a resounding success. Enquiries were made concerning the possibility of a similar event being held – but preferably in the near future and not in another fifty years' time!

*Gwyn Green*

### **Gwyn's Brown Bread Ice Cream**

**Delicious served with a sharp fruit purée (raspberry and/or strawberry and/or redcurrant, apricot, or mango and passion fruit) or with a fresh fruit salad.**

1. Spread **1/2 pt (275 ml) brown breadcrumbs** (granary or wholemeal) over foil covering the grid of a grill pan
2. Spread **1/4 pt (150 ml) demerara sugar** evenly over the breadcrumbs
3. EITHER place the grill pan at low level under a preheated grill on maximum heat to caramelize the sugar OR use a gas blowtorch to melt the sugar. (If some of the sugar goes dark do not worry, it adds to the flavour.) Leave to cool.
4. Whisk **4 large egg whites** to a froth, add **4 oz (110 g) sieved icing sugar** while continuing to whisk
5. Add **4 egg yolks**, one at a time, while continuing to whisk.
6. Whip **1/2 pt (275 ml) double cream** to a smooth thick cloud, but stop before solid. If preferred, whipping cream may be used.
7. Crack the caramelized breadcrumbs and pulse in a food processor until crumb-like. Fold all the ingredients carefully together and mix thoroughly.
8. Line a **2 pt (1 litre) plastic container** with cling film and pile the mixture inside. Cover with film and place in the freezer. No need to check or stir the mixture during freezing. Make in the morning – eat in the evening!

Makes about 2 pints (just over 1 litre)

A limited number of commemorative paperweights is available from the Midlands Branch at a price of £5 each. For details contact Gwyn Green on 0121 445 5359.

# A sparkling weekend in Perth

Adrian Smith reports on the Gem-A Scottish Branch Conference held from 3 to 7 May

Is it really a year since the 'Gemmies' had fun and frolics in Perth? What is fast becoming a pilgrimage for some people, started in the glorious Scottish sunshine on the Friday evening.

Christine Rew kicked off the proceedings with a colourful slide lecture entitled *Material Innovations*. Christine, the Keeper of Applied Art at the Aberdeen Art Gallery and Freeman of the Worshipful Company of Goldsmiths, is well qualified to give an insight into some of the new materials that Scottish contemporary jewellers have been turning to in recent years – and they are not all gemmological in nature. Man-made substances, such as resins, plastic and glass all have their place, as do some unusual organic materials such as driftwood and shell.

There followed a meal at the hotel for all delegates. This was a great opportunity for old friends from previous conferences to 'meet up and catch up'. Polite chat soon gave way to relaxed laughter – well into the not so wee hours!

Saturday morning was started

in great style by Professor Alan Collins, President of Gem-A. In delivering his very professional lecture *Coloured diamonds*, Alan succeeded where many others had failed; I actually understood it! He illustrated the structure of the various types of diamond and the effect that treatments, such as HPHT, irradiation and annealing, have on their make-up. This subject was covered in great depth and clarity. Congratulations are due to Alan as, in speaking to fellow delegates afterwards, I discovered that I was not the only one who finally heard the penny drop!

Our Keynote speaker was Ted Themelis. A former Director of Research and Development for the Accredited Gemologists Association, Ted now maintains a thermochemical laboratory in Bangkok and is a world class authority on gem treatments, particularly heat treatment. Ted explained both the processes which he has pioneered and the equipment that he uses, much of which he actually built himself. We really were treated to an insider's view of the heat-treatment

industry. With the aid of colourful illustrations Ted showed examples of some of the changes that treatments can bring about in gem materials.

Lunchtime saw more opportunities for camaraderie and banter, and a chance to buy books and gemstones. Also, at this point some of our sponsors showed their wares and offered advice on the services that they offer. The conference would not happen were it not for the generous and relentless support of our sponsors.

Brian Dunn opened the afternoon session with a lecture curiously entitled *Fin de Siècle Jewellery – the Naughty Nineties*.

Brian is the Valuer at Asprey & Garrard and is involved with several trade committees. Brian plotted some of the events that shaped the 1890s and illustrated how the jewellery fitted in to this with the use of some fine photographs.

Brian's talk was, by his own admission, an irreverent, side-ways look at this important period in jewellery design and was delivered in Brian's usual humorous manner.

Time for a quick break, with more small groups forming as delegates produced little treasures from their pockets for the pleasure of others. I believe the collective name for gemmologists should be a 'Huddle'.

Terry Davidson, the acting Chief Executive Officer of Gem-A, gave a short address to the delegates, outlining the current news from HQ. The future looks optimistic and there are obviously some exciting plans for Gem-A.

Jim Finlayson was our next speaker. Jim is a cutter who competes and judges in international faceting competitions and has a keen interest in developing new techniques in this ancient skill. He explained the history of faceting from its 'secret craft' beginnings to the new computer-aided cutting of today.



(From the left) Alan Hodgkinson and Brian Jackson (Branch President and Chairman respectively) with keynote speaker Ted Themelis and Terry Davidson, acting CEO of Gem-A, at the Scottish Branch Conference.



## Displays and demonstrations

The conference workshop session held on the Sunday afternoon proved very popular, with even more displays and demonstrations than in previous years. These included:

**Ted Themelis** who gave a hands-on session with 50 stones under a battery of microscopes.

**Clive Burch** exhibited examples of inclusion photography.

**Martin Donoghue, Jim Finlayson and Jim Gemmell** gave a demonstration of faceting.

**Alan Hodgkinson** displayed some new gemmological instruments and samples.

**Brian Jackson and John McInnes** showed images of inclusions in synthetics from the past and present.

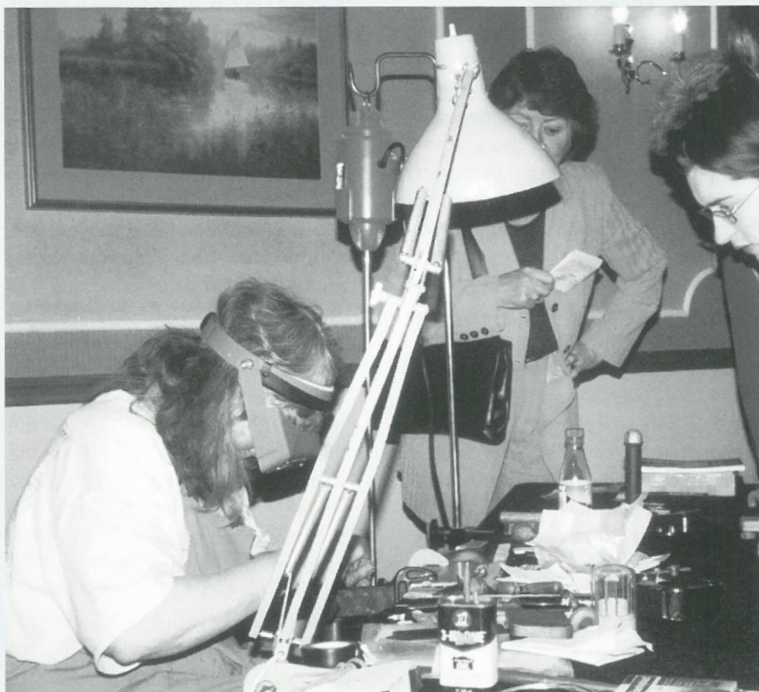
**Camilla Nichol** showed some examples of jade and its simulants.

**Joanna Thomson** demonstrated methods of jewellery manufacture.

**John Harris** showed various spectroscopy techniques, including some very funky glasses!

**Alistir Tait** distributed a useful card of gemstone data and displayed information about his company.

**IJS Ltd** demonstrated stock control and point-of-sale software developed for the jewellery trade.



*Joanna Thomson demonstrates gem setting techniques.*

**The Guild of Independent Valuers** gave information about the Guild and demonstrated software for valuations.

**Marcus McCallum** offered a range of interesting gemstones for sale.

**Gemro Associates** showed the Quantum Leap Appraisal Software and the Image Dome photographic system.



*How to tell a ruby from a garnet at a distance of 6 ft! John Harris (centre) demonstrates his 'funky glasses' to Alan Collins, while Terence Watts tries out the lens material in sheet form.*



*Martin Donoghue (right) explains the finer points of faceting to Ian Hammond.*



Concave facets? They are now a reality and certainly bring out that all-important 'twinkle factor'.

The Branch AGM followed, when the Office Bearers reported the healthy state of the branch, both in terms of activities and finances. Mary Burland brought news from London. The open forum produced several good suggestions from the floor and, as always, education was the main topic.

Saturday night – party time! The delegates were joined by several of our sponsors and friends from the local jewellery and gem trade to make the evening swing. A great meal was followed by a demonstration of Scottish Country Dancing by a local dance club. Once we had watched how it was done it was our turn! Great hilarity followed as a result.

We all danced and chatted the evening away with a great sense of companionship. You can't have too much of a good thing, and the usual merry band of revellers continued until dawn.

**Philip Stocker** opened

*Field trip: Ray Rimmer (left), North West Branch Secretary, and Brian Jackson searching for specimens at Loch Tay.*



Sunday's events with an unusual talk entitled Gemmology and the Expert Witness. Philip is well known for his court appearances (in the positive sense, I am sure!) as he is often called upon to give evidence in both criminal and civil court cases. One such high profile case was that of Rowland v Al Fayed, and it was on this that his presentation was based. Philip recounted the features of the case from a gemmological point of view, and demonstrated how he proved the nature and value of these missing stones. His evidence was instrumental in winning the case for his clients.

Next, it was time for our keynote speaker **Ted Themelis** to take the stand. The research for Ted's book *Mogok, Valley of Rubies and Sapphires* had taken him on many visits to this unique area and he gave a fascinating lecture on his experiences in gathering the original information. Myanmar is not a place that is easily visited due to restrictions imposed by the Government, but Ted is one of the few people privileged enough to be allowed to travel in this country, albeit under constant state supervision.

He touched on the country's history, culture and people but most of all, of course, its gems. I think all the delegates felt privileged to be able to hear of Ted's travels first hand.

Lunch followed with more advice and demonstrations by our sponsors, followed by the popular workshop sessions.

In the evening it was time to wind down at a local restaurant. We were lucky enough to be able to take over the entire restaurant, which meant there was much 'seat hopping', a good opportunity for goodbyes to be said to those who sadly had to return to business life.

For those that just don't know when to call it a day, a field trip on the Monday was a fitting ending to another successful Conference. A merry, if a little tired, group headed off for the Perthshire hills on the edge of Loch Tay. Yet another

## Thank you ...

The Branch Committee would like to take this opportunity to give very sincere thanks to:

### Sponsors

**T.H.March & Co Ltd, Marcus McCallum, The Guild of Independent Valuers, IJS Ltd and Alistir Tait**

### Major Supporter

**Henderson the Jeweller, Glasgow**

### Supporters

**Backes & Strauss, Cairncross of Perth, Gemro Associates, Jamieson & Carry, Ian Mundle & Son, and the Perthshire Jewellery Company**

The Committee would also like to express their thanks and admiration to their beloved Secretary, Catriona McInnes, whose hard work, enthusiasm and dedication to this conference went way beyond the call of duty. It simply would not have been the success that it was, without her tremendous work.

glorious blue sky, with clear sunshine sparkling on the Lochan by which we searched for garnet, rutile, pyrite cubes and cuttable smoky quartz (which from this locality can have a lovely peach overtone). Some of us were successful in our quest but all enjoyed a relaxing day in surroundings of breathtaking beauty.

And so there ended the Seventh Annual Conference of the Scottish Branch, yet again with a record attendance. Our watchword has always been 'gemmology should be fun' and, as in previous years, this conference certainly lived up to that. But one word could be used to describe the overall tone of this gathering, its delegates, its speakers and those who organized it – **Enthusiasm**. It is very catching – will you be joining us to get infected next year?



## Charles Horner of Halifax, a celebration of his life and work

**Tom J. Lawson, 2002. 304pp, c 2,400 products are illustrated in over 650 plates, more than 400 in colour. 305 x 216 mm, hardbound with DW. ISBN 0-9542354-0-1. GML Publishing, Distributed by Antique Collectors Club. £45.**

This book traces the history of the firm of Charles Horner from 1857, when Charles Horner finished his apprenticeship and started business as a jeweller and watchmaker, until its dissolution in 1984. The firm really took off with the invention of the steel-cored 'Dorcas' silver thimble. This was patented in 1885, and solved the problem of steel needles piercing the silver. The chapter on thimbles has been written by a thimble expert, Norma Spicer. The business also benefited greatly from the very popular early 20th century fashion for hatpins. The well-known Art Nouveau designs were mass-produced in enormous numbers. In the 1920s Horner diversified into the production of casein plastic (Dorcasine™) which it mainly supplied as blanks to finishers, although there is evidence that it also produced finished products. The biggest use of Dorcasine appeared to be for buttons, but a wide range of other items from knitting needles to jewellery was made. Over the century and a quarter of its life Horner also produced a wide range of other products including small jewellery and silver.

There are fascinating chapters

on designs and catalogues complete with prices, and on fakes and forgeries. The book finishes with a useful glossary, a good bibliography and a professionally produced index.

The majority of jewellery books fall into two general categories. They are either written by academics, or by professional writers who, although they initially know nothing about the subject, have been commissioned to rapidly fill a perceived gap in a publishers list. The latter are usually worthless for any serious student. The former are often superb reference works with extremely long shelf lives, but equally often brush over the practical business and production side of the jewellery. Tom Lawson is not a professional writer, nor has he been professionally involved in the jewellery world, but he has, over thirty years, become increasingly fascinated with Charles Horner. He is an engineer and manager, and his history of the firm has greatly benefited from his experience in including many insights into design pressures, production and marketing. These are vital areas that are rarely dealt with, and much of this information must be relevant to other firms of the period. The overall quality of the book also reflects his immense enthusiasm for his subject, and his perseverance.

The book is beautifully produced. Tom Lawson has gone to enormous lengths to produce a truly staggering number and range of

*Charles Horner of Halifax* may be purchased by SJH and Gem-A members at the special price of £37 including UK post and packing. Credit cards are not accepted. Overseas members should write or e-mail for a proforma invoice. Order direct from GML Publishing, PO Box 6722, Leicester LE2 2YH. E-mail: [gmlp@clara.co.uk](mailto:gmlp@clara.co.uk)  
Mention *Gem & Jewellery News*.

illustrations, which are excellently reproduced on good quality paper. This reviewer is particularly delighted to see the use of footnotes, rather than the now almost ubiquitous (and virtually useless for most normal readers) endnotes. The nice modern touch of printing the footnote numbers in red, both in the text and with the footnote, makes it particularly easy to glance down, read the footnote and then re-find one's place in the text.

This is a book that can be enthusiastically recommended to a varied readership: including those interested in jewellery (particularly Art Nouveau), silver (particularly thimbles), plastics and costume (buttons), patents, designs, production techniques and marketing, as well as those interested in the history of companies.

*Nigel Israel*

## SJH welcomes Editor

**The Committee of the Society of Jewellery Historians would like to welcome Dr Anna Beatriz Chadour-Sampson as editor for *Jewellery Studies*.**

She is an eminent decorative art historian and author of the two-

volume *Rings – The Alice and Louis Koch Collection*, and gave a fascinating lecture on this research to the SJH.

She would be pleased to receive articles from members and information on jewellery research.

## SJH Committee

Members of the SJH are reminded that AGM nominations for the Committee should be sent, accompanied by the written consent of the nominee, to the Honorary Secretary at the address given on p.42 by 30 September.

# Discoveries at the Club

Michael O'Donoghue reports on some of the stones under scrutiny at the Gem Discovery Club

**W**ednesday evening at the Gem Discovery Club in Greville Street continues to provide surprises.

One member (mentioned last time) who had been to Kashmir and subsequently conducted a correspondence with dealers in

Srinagar with a view to obtaining specimens of Kashmir sapphire (he was well aware of the difficulties, being familiar with conditions there), was sent a letter from Srinagar offering faceted Kashmir sapphires, with colour photographs (return to these in a moment). Accompanying

the photographs were rectangles of dyed cloth whose colours (shades of blue) purported to be the same as or close to the colours of the stones on offer. Returning to the photographs, someone had marked the stones with the business end of a ballpoint pen to simulate inclusions or perhaps surface features of the goods on offer.

Specimens of 'green tourmaline' offered to a central London jeweller turned out to be green quartz whose colour was almost certainly artificial and in which dichroism was very strong (olive-green, bluish-green) for coloured quartz. There were no easy-to-see inclusions (perhaps some short needles) but a very marked and beautiful bull's-eye effect was obtained with the pocket polariscope. The refractive index could just be made out at just over 1.5. I thought 'artificially coloured quartz' from the start!

It was dichroism week as a pale blue specimen showed pale violet and pale green colours, suggesting something like an unusually-coloured tanzanite. In fact the specimen turned out to be corundum, perhaps not natural.

In early March we were able to spend some time in the Library, just long enough to get some idea of the possibilities of a literature search.

Among some of the 'mystery stones' put out to catch the unwary were a fine 'Herkimer diamond', a natural colourless sapphire, a faceted brazilianite [where are the large ones now?] and a faceted andalusite cut so that the pink colour showed face-up: this caused some speculation!

Among the specimens we shall be looking at soon are two beautifully-patterned cabochons which give the immediate impression of chalcedony. They are in fact thomsonite, one of the zeolite group of minerals: the most important locations are on the shores of Lake Superior in North America.

## Diamonds: new aspects of cut



*Joseph Tenhagen speaking at the Gem-A*

**J**oseph W. Tenhagen of Miami, Florida, gave an illustrated lecture on the elements of cut grade analysis in round brilliant-cut diamonds using special three-dimensional colour photo imaging techniques, to members of Gem-A on Friday 3 May.

With the use of controlled colour-coded red, green and blue light entering through the crown in specific order and angular relationships, Joe showed how it was possible to visually demonstrate a diamond's internal light handling capability. Using the methods he had developed, he illustrated how it was

possible to see the proportions, symmetry and the amount of brilliance in a diamond through the crown and the amount of light lost through the pavilion. These visual representations change with even the slightest change in any one of the diamond's proportions or symmetry. In his research to date, no two diamonds had the exact same visual representation.

Gem-A is most grateful to Joe for presenting the lecture and also for the donation of a large collection of gem specimens which are being incorporated into the Association's teaching sets.



# An amber bottle

Maggie Campbell Pedersen reports on the latest addition to her organics collection

**A** few weeks ago a small bottle was offered to me for sale. At first glance it looked like a Chinese carving, possibly old and of Burmese amber, but on closer inspection it became apparent that it was not that simple.

The entire piece is made up of small, rectangular blocks of material, stuck (not welded) together. Clear joins can be seen in some areas. The circular neck has obviously been added separately and might possibly be of a different material. The stopper, which matches the body of the bottle, is mounted on a black disc (probably plastic), and attached to this, hanging inside the bottle, is a tiny horn spoon. This stopper is not a perfect fit so it had been held in place by a ring of sticky tape that was easily removed. The carving is very pretty but not as intricate as might be expected of a valuable, old Chinese carving, and in some areas looks almost as if it could be moulded. When left in a sealed bag for a few days there was a very strong smell that was not at all resinous.

The appearance and feel of the material was, however, still telling me that it was amber, but in need of expert advice I visited Helen Fraquet who kindly spent some time examining the item. Having seen similar pieces she was of the opinion that it could well have been made in



*The 'amber' bottle.*

China, and from blocks of Burmese amber, but probably around 1960.

At her suggestion I took the bottle to Gary Jones at the Department of Mineralogy at The Natural History Museum. He took a small scraping from the base of the bottle that he tested by infrared spectroscopy. We were not able to test the neck as a scraping from the outside would have left a mark, and the inside was contaminated by whatever had been in the bottle (possibly the sticky tape). The result came back: "The spectrum is that of a natural retinite resin and is close to (but not identical to) one I have of Burmese amber".

The smell disappeared when I removed the tape from the stopper, and if sealed up for several days the bottle now no longer emits any smell. The pressed effect of the carving is, I believe, due to slightly excessive polishing after carving giving a rounded look with no sharp edges, and the blocks have probably been stuck together with canada balsam or copal.

Though I may never know exactly what it is in all details, the bottle is a beautiful little addition to my collection.



*Detail of blocks.*

# Survey of the technology of 18th and 19th century jewellery

**O**n Tuesday 30 April Jack Ogden gave a lecture to the SJH entitled 'Hot flames, cold steel: the manufacture of Georgian and Victorian jewellery'.

In this lecture he summarized his recent research into a period which saw more changes within the jewellery industry than at any time previously – the 18th and 19th centuries. Jack illustrated his lecture with illustrations of jewellery tools and manufacture, including computer-based three-dimensional reconstructions of jewellery and tools that could be rotated and scaled on-screen.

The Industrial Revolution changed the nature of machinery and tools, and the power used to drive them. One fundamental development was the introduction of cast steel in 1740. This new material allowed huge advances in the machinery used to work precious metals. For example, the production of sheet metal using rolling mills was not new, but the appearance of polished steel rolls meant that gold and silver sheet of considerable

smoothness was now available. This had obvious repercussions in the precious metal industries such as the birth of 'Old Sheffield Plate' and the encouragement of the fashion for gold boxes constructed from flat sheet. Flat sheet also permitted fine engine turning where an absolutely flat surface was of paramount importance.

The Industrial Revolution also introduced a world of more economical tool production. The use of the piercing saw, for example, only became prevalent in jewellery workshops once the fragile blades could be made cheaply in large numbers.

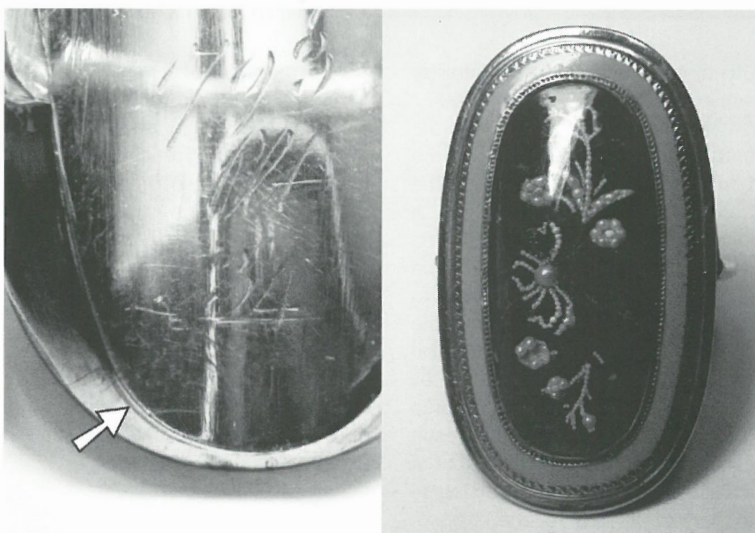
Cast steel also allowed advances in the die presses used to shape sheet gold and silver components and, eventually, whole objects. Although well documented from the 18th century, the machine stamping of jewellery became particularly prevalent after about 1850. This was partly a result of the increased demand for jewellery by the new middle classes, but also perhaps because the composition of

the lower carat 'bright gold' made one-piece stamping less problematic than the soldered assembly of numerous components.

Jack also reminded us that the soldering process usually associated with traditional jewellery manufacture – a craftsman blowing down a curved blowpipe to direct the heat of a flame onto his work – was not an ancient process. Up to the Renaissance, jewellery soldering was carried out by heating the entire object or component on charcoal or in a small furnace. This approach limited the type of soldering possible. A blowpipe plus flame was first used by glass workers and seemingly only entered the jewellery workshop during the course of the 17th century. This new technology permitted finer solder joints – such as individually soldered chain links. Even so the lamp oils and candles then available tended to produce soot particles which made them unsuitable for all jewellery work. Better heat sources were only widespread in the eighteenth century with the introduction of cleaner oils and spirit lamps and, from the early 19th century, gas.

Casting, another process employing heat, was not used for gold jewellery on a large scale until the twentieth century and in particular until after the introduction of silicon rubber moulds for wax antitypes in the 1930s.

In his lecture Jack stressed that jewellery must be understood in almost evolutionary terms. Material, technology and design are all interrelated, and any item of jewellery is a product of its age. The great goldsmiths pushed the potentials of new materials and techniques to their limits, but advances in technology, particularly the introduction of new materials, were the main driving forces in jewellery history.



Gold, enamel and pearl ring dated 1793. The arrow marks one of the silver-rich solder seams typical for certain classes of Georgian jewellery. © Jack Ogden 2002.



## GEM-A AND SJH LONDON EVENTS

Details of times, venues and prices are given on p.60

### 26 June - Gem-A lecture

*Burma ruby and new corundum treatments*

#### RICHARD HUGHES

Highlights will include a description of the Mogok Stone Tract in Burma; descriptions of ruby heat treatment; elements that produce a top ruby; inclusions and photos illustrating flux healing in Mong Hsu rubies; new techniques in bulk ('surface') diffusion of ruby and sapphire.

Richard W. Hughes is one of the world's foremost authorities on ruby and sapphire. His latest book, *Ruby & Sapphire*, became an instant classic upon publication in 1997.

Richard has travelled extensively in search of precious stones and authored dozens of articles on all aspects of the gem and jewellery trades. His irreverent writing style has attracted a widespread following throughout the world, making him much in demand as both speaker and writer.

### 24 September: SJH lecture

*A history of hair jewellery*

#### ANN LOUISE LUTHI

Ann Louise Luthi is a collector of sentimental jewellery with a special interest in the use of hair in jewellery. When she found that all previous books on Sentimental Jewellery were out of print, she decided to write one herself. At present she is working at the British Museum helping Judy Rudoie with the collection of Posy Rings left to the museum by Dame Joan Evans.

## Court Jewellers, Splendour, Finance and Intrigue

This two-day symposium, organized by the Society of Jewellery Historians, will be held in London on Thursday and Friday, 26 and 27 September. Distinguished international lecturers will talk on subjects ranging geographically through India, Russia, Europe and England, and chronologically through five centuries. Gem-A members are invited to write for an application form to the SJH Chairman at the address given on p.42.

## Gem Seminar Theatre at IJL

A Gem Seminar Theatre, sponsored by Malca-Amit (UK) Ltd, in collaboration with Gem-A and the GIA, will be a new feature at this year's Earl's Court jewellery fair to be held from 1 to 4 September.

Presentations will include:

Fashion and value. ROSAMOND CLAYTON, NAG Registered Valuer  
 Passion for pearls. CHRISTIANNE DOUGLAS, Christianne Douglas Pearls  
 Myths and magic of gemstones. DOUG GARROD, Gem-A  
 Is it orange or just skin deep? MARTIN HARMON, GIA  
 Diamond: demystifying cut. MARTIN HARMON, GIA  
 Buying gemstones at auction. DAVID LANCASTER, Christie's South Kensington  
 You buy what you see. HARRY LEVY, Chairman, BJA  
 How much will you give me for my reputation? HAYWOOD MILTON, Miltons (Liverpool) Ltd, Jewellers and Pawnbrokers

A detailed programme of the dates and times of presentations can be viewed on the Gem-A website at [www.gagtl.com](http://www.gagtl.com)

My old friend the trickster came skipping into my office again. "I have a real bargain for you, a beautiful sapphire at a price you cannot refuse." I looked at the stone. It was a most beautiful blue colour and his asking price was too good to be true. I expressed my feelings about the price and he confessed that it was a "deep diffusion sapphire". Having bought the stone, could I now sell it as a deep diffusion sapphire (it was certainly a corundum) or had he cheated me yet again?

### Solution to the last puzzle

The answer is five sapphires. This is basically solving simultaneous equations, but in this instance we do not have to do the sums.

2 sapphires = 1 pink + 2 green tourmalines

3 sapphires = 3 pink + 2 green tourmalines

If we add these up we will get 5 sapphires = 4 pink + 4 green tourmalines, which are what he had left.

The correct answer was submitted by Rory Graham of London.

*Harry Levy*

## Gem-A Conference 2002

To be held on Sunday 3 November at Kempton Park Racecourse, Sunbury on Thames, Middx, during the late-autumn Rock 'n' Gem Show.

Speakers will include:

**PROFESSOR DR EDWARD GÜBELIN**  
**PROFESSOR ANDREW RANKIN**  
**DR ROBERT SYMES OBE**

Full details will be published in the July issue of *The Journal of Gemmology*.

# Gemmological Association and Gem Testing Laboratory of Great Britain

## London

Unless otherwise stated, meetings will be held at the Gem-A Gem Tutorial Centre, 27 Greville Street (Saffron Hill entrance), London EC1N 8TN, at 6.00 for 6.30 p.m. Entry will be by ticket only at £5.00 for a Gem-A member (£7.50 for a non-member). Further details of summer meetings are given on p.59.

**26 June.** RICHARD HUGHES

Burma ruby and new corundum treatments

**25 September.** Annual General Meeting and lecture (Gem-A members only – free of charge)

**3 November.** Gem-A Conference 2002 (see p. 59)

**4 November.** Presentation of Awards and Reunion of Members (full details will be published in the September issue of *GJM*)

## Midlands Branch

Friday meetings will be held at The Earth Sciences Building, University of Birmingham, Edgbaston at 6.30 for 7.00 p.m. Admission £2 for a member For further information call 0121 445 5359. Gem Club is held from 3 to 6 p.m.

**22 June.** *Summer Supper Party.*

**27 September.** RICHARD TAYLOR

Diamonds, certification, appraisal and valuation

**25 October.** ALAN HODGKINSON

Tucson surprises – the highlights of Tucson 2002

**29 November.** STEPHEN DALE

Fabulous Fabergé expert, auctioneer and buyer

**7 December.** Celebration 50th Anniversary Dinner

Venue: Barnt Green, Worcestershire

## North West Branch

Meetings will be held at the Church House, Hanover Street, Liverpool 1. For further details contact Deanna Brady on 0151 648 4266.

**19 June.** Bring and Buy

**18 September.** JOHN HARRIS

Chasing rainbows

**16 October.** ROSEMARY I. McIVER

Jewels for a Royal occasion

**20 November.** AGM and social evening

## Scottish Branch

For further details of Scottish Branch meetings contact Catriona McInnes on 0131 667 2199.

**30 June. The George Lindley & Co. Lecture**

RICHARD HUGHES

Crossing gemmological frontiers

To be held at the National Museum of Scotland, Chambers Street, Edinburgh, at 2.30 p.m. Sponsored by George Lindley & Co., 3-5 Bleeding Heart Yard, Greville Street, London EC1N 8JS.

## South West Branch

Contact Bronwen Harman on 01225 482188.

## Society of Jewellery Historians

Unless otherwise stated, all Society of Jewellery Historians' lectures are held at the Society of Antiquaries, Burlington House, London W1 and start at 6.00 p.m. sharp. Lectures are followed by an informal reception with wine. Meetings are open only to SJH members and their guests.

A nominal charge is made for wine to comply with our charity status. Further details of summer meetings are given on p. 59.

**2 July.** SHENA MASON

Redeeming Birmingham: the work of T. & J. Bragg

**24 September.** ANN LOUISE LUTHI

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**26/27 September.** Two-day symposium 'Court Jewellers - Splendour, Finance and Intrigue'

**22 October.** JUDY RUDEO

Jewellery at the Great Exhibition

**26 November.** CHARLOTTE GERE

Victorian Romantics: dressing up in the 19th century